ExxonMobil
Refining and Supply Company
Downstream - Safety, Health & Environment
Environmental Remediation
2300 Clayton Road, Suite 1250
P.O. Box 4032
Concord, CA 94524-4032
(925) 246-8747 Telephone
(925) 246-8798 Facsimile
gene.n.ortega@exxon.com

#245

Gene N. Ortega
Territory Manager
Global Remediation – US Retail

This data should be in GEMIS.

ExxonMobil
Refining & Supply

September 7, 2001

Mr. Barney Chan
Alameda County Health Care Services Agency
Department of Environmental Health
1131 Harbor Bay Parkway, Room 250
Alameda, California 94502-6577

SEP 10 2001

RE: Former Exxon RAS #7-0238/2200 East 12th Street, Oakland, California.

Dear Mr. Chan:

Attached for your review and comment is a letter report entitled ***Quarterly Groundwater Monitoring Report, Third Quarter 2001,*** dated September 6, 2001, for the above referenced site. The report was prepared by Environmental Resolutions, Inc. (ERI) of Novato, California, and details the results of the quarterly groundwater monitoring and sampling activities at the subject site.

If you have any questions or comments, please contact me at (925) 246-8747.

Sincerely,

Gene N. Ortega
Territory Manager

Attachment: ERI's Quarterly Groundwater Monitoring Report, Third Quarter 2001, dated September 6, 2001.

cc: w/ attachment
Mr. Stephen Hill, California Regional Water Quality Control Board, San Francisco Bay Region
Mr. Winson B. Low, Environmental and Safety Affairs Department

w/o attachment
Mr. Scott D. Thompson, Environmental Resolutions, Inc.

ENVIRONMENTAL RESOLUTIONS, INC.

September 6, 2001
ERI 229313.R13

SEP 10 2001

Mr. Gene N. Ortega
ExxonMobil Refining and Supply
P.O. Box 4032
Concord, California 94524-4032

Subject: Quarterly Groundwater Monitoring Report, Third Quarter 2001, Former Exxon Service Station 7-0238, 2200 East 12th Street, Oakland, California.

Mr. Ortega:

At the request of ExxonMobil Refining and Supply (formerly Exxon Company, U.S.A.) (ExxonMobil), Environmental Resolutions, Inc. (ERI) performed the third quarter 2001 groundwater monitoring and sampling event. The location of the site is shown on the Site Vicinity Map (Plate 1). The purpose of quarterly monitoring and sampling is to evaluate maximum concentrations of dissolved hydrocarbons in groundwater and groundwater flow direction and hydraulic gradient.

GROUNDWATER MONITORING AND SAMPLING

On July 12, 2001, ERI measured depth to water (DTW) and collected groundwater samples from select monitoring wells for laboratory analysis. Due to a measurement error during the original sampling event, ERI re-measured DTW from monitoring wells on August 17, 2001. ERI used this most recent data to calculate the hydraulic gradient. Groundwater monitoring and sampling were performed in accordance with ERI's groundwater sampling protocol (Attachment A).

The calculated hydraulic gradient and groundwater flow direction are presented on Plate 2. Historical and recent monitoring data are summarized in Table 1.

Laboratory Analyses and Results

Groundwater samples were submitted to Southern Petroleum Laboratories, Inc. (SPL), a California state-certified laboratory, under Chain-of-Custody protocol. The samples were analyzed for benzene, toluene, ethylbenzene, and total xylenes (BTEX); methyl tertiary butyl ether (MTBE); and total petroleum hydrocarbons as gasoline (TPHg), using the methods listed in the notes in Table 1. The laboratory analysis report and Chain-of-Custody record are attached (Attachment B). Cumulative results of laboratory analyses of groundwater samples are summarized in Table 1. The results of analyses of groundwater samples collected during the recent sampling event are shown on Plate 2.

LIMITATIONS

This report was prepared in accordance with generally accepted standards of environmental practice in California at the time this investigation was performed. This report has been prepared for ExxonMobil, and any reliance on this report by third parties shall be at such party's sole risk.

ERI recommends forwarding copies of this report to:

Mr. Barney Chan
Alameda County Health Care Services Agency
Department of Environmental Health
1131 Harbor Bay Parkway, Room 250
Alameda, California 94502-6577

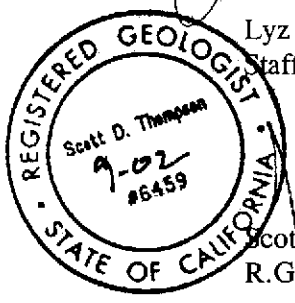
Mr. Stephen Hill
California Regional Water Quality Control Board
San Francisco Bay Region
1515 Clay Street, Suite 1400
Oakland, California 94612

Mr. Winson B. Low
Environmental and Safety Affairs Department
One Valero Place, MS-06E
San Antonio, Texas 78212

Please call Mr. Scott D. Thompson, ERI's project manager for this site, at (415) 382-5987, with any questions regarding this project.

Sincerely,
Environmental Resolutions, Inc.

Lyz A. Cullmann
Staff Geologist



Scott D. Thompson
R.G. 6459

Attachments:

Table 1:	Cumulative Groundwater Monitoring and Sampling Data
Plate 1:	Site Vicinity Map
Plate 2:	Generalized Site Plan
Attachment A:	Groundwater Sampling Protocol
Attachment B:	Laboratory Analysis Report and Chain-of-Custody Record

TABLE 1
CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA
Former Exxon Service Station 7-0238
2200 East 12th Street
Oakland, California

Well ID # (TOC)	Sampling Date	SUBJ	DTW	Elev.	TPHg	MTBE	B	T	E	X
		<	feet	>	<		ug/L			>
MW9A	11/02/95	NLPH	7.16	4.30	<50	<10	<0.5	<0.5	<0.5	<0.5
(11.46)	04/26/96	NLPH	6.33	5.13	---	---	---	---	---	---
	08/22/96	NLPH	7.02	4.44	---	---	---	---	---	---
	02/24/97	---	---	---	---	---	---	---	---	---
	03/16/98	NLPH	6.14	5.32	<200	40,000	7.9	<2.0	<2.0	<2.0
	04/21/98	NLPH	6.29	5.17	<50	53,000	3.8	<0.5	<0.5	<0.5
(14.53)	07/22/98	NLPH	6.58	7.95	<250	18,000	<2.5	<2.5	<2.5	<2.5
	12/22/98	NLPH	6.47	8.06	<50	5,200	<0.5	<0.5	<0.5	<0.5
	02/26/99	NLPH	6.38	8.15	<100	10,000	<1.0	<1.0	<1.0	<1.0
	5/27/99 b	NLPH	6.56	7.97	<5,000	15,300	<50	<50	<50	<50
	08/03/99	NLPH	9.39	5.14	<50	<2.5	<0.5	<0.5	<0.5	<0.5
	12/03/99	NLPH	6.52	8.01	<50	1,400	<0.5	<0.5	<0.5	0.67 c
	02/29/00	NLPH	5.31	9.22	<50	20,000	1.2	<0.5	<0.5	<0.5
	05/18/00	NLPH	6.31	8.22	<50	14,000/11,000a	<0.5	<0.5	<0.5	<0.5
	07/24/00	NLPH	6.54	7.99	<50	7,400	<0.5	<0.5	<0.5	<0.5
	10/09/00	NLPH	6.00	8.53	<50	2,300	<0.5	<0.5	<0.5	<0.5
	01/10/01	NLPH	6.34	8.19	<50	3,700	<0.5	<0.5	<0.5	<0.5
	04/10/01	NLPH	9.31	5.22	<50	11,000	<0.5	<0.5	<0.5	<0.5
	07/12/01	**NLPH**	**---**	**---**	**<50**	**3,600**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
	8/17/01 d	**---**	**6.61**	**7.92**	**---**	**---**	**---**	**---**	**---**	**---**
MW9B	11/02/95	NLPH	6.14	3.66	130	<10	3.3	<0.5	<0.5	<0.5
(9.80)	04/26/96	NLPH	5.66	4.14	270	70	130	2.8	6.7	<3
	08/22/96	NLPH	6.16	3.64	210	31	5.7	6.8	1.1	9.2
	02/24/97	NLPH	5.58	4.22	1,400	1,300	76	1.4	4.1	1.2
	03/16/98	NLPH	5.32	4.48	860	1,500	140	2.0	11	<2.0
	04/21/98	NLPH	5.49	4.31	1,800	18,000	300	<5.0	7.9	<5.0
(12.83)	07/22/98	NLPH	5.79	7.04	<500	26,000	13	<5.0	<5.0	<5.0
	12/22/98	NLPH	5.69	7.14	700	21,000	110	3.1	9.1	14
	02/26/99	NLPH	5.10	7.73	8,800	8,000	2,000	<25	52	38
	05/18/99	NLPH	5.65	7.18	<10,000	42,100	158	<100	<100	<100
	08/03/99	NLPH	6.24	6.59	960	24,900	<5.0	<5.0	<5.0	<5.0
	12/03/99	NLPH	5.66	7.17	<50	1,000	<0.5	<0.5	<0.5	<0.5
	02/29/00	NLPH	4.61	8.22	3,100	25,000	900	7	23	7.1
	05/18/00	NLPH	5.54	7.29	780	34,000/26,000a	150	<2.5	4.5	<2.5
	07/24/00	NLPH	8.75	4.08	<250	39,000	8	<2.5	<2.5	<2.5
	10/09/00	NLPH	4.84	7.99	<1,200	30,000	1.7	<0.5	<0.5	<0.5
	01/10/01	NLPH	5.56	7.27	<250	32,000	5.3	<0.5	<0.5	<0.5
	04/10/01	NLPH	5.40	7.43	360	27,000	69.0	<2.5	22.0	29.8

TABLE 1
CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA
Former Exxon Service Station 7-0238
2200 East 12th Street
Oakland, California

Well ID # (TOC)	Sampling Date	SUBJ	DTW	Elev.	TPHg	MTBE	B	T	E	X
		<	feet	>	<		ug/L			>
MW9B (cont.)	**07/12/01**	**NLPH**	**---**	**---**	**<250**	**41,000**	**<2.5**	**<2.5**	**<2.5**	**<2.5**
(12.83)	**8/17/01 d**	**---**	**5.83**	**7.00**	**---**	**---**	**---**	**---**	**---**	**---**
MW9C	11/02/95	---	---	---	---	---	---	---	---	---
(11.14)	04/26/96	---	---	---	---	---	---	---	---	---
	08/22/96	---	---	---	---	---	---	---	---	---
	02/24/97	---	---	---	---	---	---	---	---	---
	03/16/98	NLPH	5.51	5.63	<500	150,000	24	<5.0	<5.0	<5.0
	04/21/98	NLPH	5.83	5.31	150	130,000/150,000a	<0.5	<0.5	<0.5	<0.5
(14.19)	07/22/98	NLPH	6.43	7.76	<500	95,000	<5.0	<5.0	<5.0	<5.0
	12/22/98	NLPH	6.16	8.03	<500	84,000	<5.0	<5.0	<5.0	<5.0
	02/26/99	NLPH	5.46	8.73	<250	55,000	<2.5	<2.5	<2.5	<2.5
	05/18/99	NLPH	6.27	7.92	<25,000	68,900	<250	<250	<250	<250
	08/03/99	NLPH	7.13	7.06	210	69,200	<1.0	1.3	<1.0	<1.0
	12/03/99	NLPH	6.17	8.02	290	50,000	<2.5	<2.5	<2.5	<2.5
	02/29/00	NLPH	4.49	9.70	<250	40,000	<2.5	<2.5	<2.5	<2.5
	05/18/00	NLPH	5.96	8.23	<250	46,000/33,000	<2.5	<2.5	<2.5	<2.5
	07/24/00	NLPH	6.47	7.72	<250	44,000	<2.5	<2.5	<2.5	<2.5
	10/09/00	NLPH	6.57	7.62	<250	39,000	<2.5	<2.5	<2.5	<2.5
	01/10/01	NLPH	6.09	8.10	<250	42,000	<2.5	<2.5	<2.5	<2.5
	04/10/01	NLPH	7.88	6.31	<250	35,000	<2.5	<2.5	<2.5	<2.5
	07/12/01	**NLPH**	**---**	**---**	**<250**	**32,000**	**<2.5**	**<2.5**	**<2.5**	**<2.5**
	8/17/01 d	**---**	**6.60**	**7.59**	**---**	**---**	**---**	**---**	**---**	**---**
MW9D	11/02/95	---	---	---	---	---	---	---	---	---
(12.90)	04/26/96	---	--	--	---	---	---	---	---	---
	08/22/96	---	---	---	---	---	---	---	---	---
	02/24/97	---	---	---	---	---	---	---	---	---
	03/16/98	NLPH	6.94	5.96	<50	10	<0.5	<0.5	<0.5	<0.5
	04/21/98	NLPH	7.22	5.68	<50	12	<0.5	<0.5	<0.5	<0.5
(15.98)	07/22/98	NLPH	7.85	8.13	<50	13	<0.5	<0.5	<0.5	<0.5
	12/22/98	NLPH	7.58	8.40	<50	12	<0.5	<0.5	<0.5	<0.5
	02/26/99	NLPH	6.42	9.56	<50	310	<0.5	<0.5	<0.5	<0.5
	05/18/99	NLPH	6.55	9.43	<2,500	13,500	<25	<25	<25	<25
	08/03/99	NLPH	8.34	7.64	<50	<2.5	<0.5	<0.5	<0.5	<0.5
	12/03/99	NLPH	7.56	8.42	<50	<2	<0.5	<0.5	<0.5	<0.5
	02/29/00	NLPH	4.82	11.16	<50	2.5	<0.5	<0.5	<0.5	<0.5
	05/18/00	NLPH	7.40	8.58	<50	6.2	<0.5	<0.5	<0.5	<0.5
	07/24/00	NLPH	7.91	8.07	<50	14	<0.5	<0.5	0.85	0.74

TABLE 1
CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA
Former Exxon Service Station 7-0238
2200 East 12th Street
Oakland, California

Well ID # (TOC)	Sampling Date	SUBJ	DTW	Elev.	TPHg	MTBE	B	T	E	X
		<	feet	>	<		ug/L			>
MW9D (cont.)	10/09/00	NLPH	8.02	7.96	<50	14	<0.5	<0.5	<0.5	<0.5
(15.98)	01/10/01	NLPH	7.26	8.72	<50	18	<0.5	<0.5	<0.5	<0.5
	04/10/01	NLPH	7.32	8.66	<50	14	<0.5	<0.5	<0.5	<0.5
	07/12/01	**NLPH**	--	--	**<50**	**22**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
	08/17/01 e	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**
MW9F	11/02/95	---	---	---	---	---	---	---	---	---
(8.37)	04/26/96	NLPH	---	---	<50	57	<0.5	<0.5	<0.5	<0.5
	08/22/96	NLPH	---	---	<50	5.8	<0.5	<0.5	<0.5	<0.5
	02/24/97	NLPH	---	---	<50	<30	<0.5	<0.5	<0.5	<0.5
	03/16/98	NLPH	---	---	---	---	---	---	---	---
	04/21/98	---	---	---	---	---	---	---	---	---
(11.38)	07/22/98	---	---	---	---	---	---	---	---	---
	12/22/98	NLPH	5.47	5.91	<50	81	<0.5	<0.5	<0.5	<0.5
	02/26/99	NLPH	5.35	6.03	<50	<2.5	<0.5	<0.5	<0.5	<0.5
	05/18/99	NLPH	5.62	5.76	<50	61.6	<0.5	<0.5	<0.5	<0.5
	08/03/99	NLPH	6.32	5.06	<50	3.10	<0.5	<0.5	<0.5	<0.5
	12/03/99	NLPH	5.59	5.79	<50	<2	<0.5	<0.5	0.71	<0.5
	02/29/00	NLPH	4.70	6.68	<50	52	<0.5	<0.5	<0.5	<0.5
	05/18/00	NLPH	5.37	6.01	<50	65	<0.5	<0.5	<0.5	<0.5
	07/24/00	NLPH	5.65	5.73	<50	170	<0.5	<0.5	<0.5	<0.5
	10/09/00	NLPH	5.71	5.67	<50	170	<0.5	<0.5	<0.5	<0.5
	01/10/01	NLPH	4.30	7.08	<50	140	<0.5	<0.5	<0.5	<0.5
	04/10/01	NLPH	5.20	6.18	<50	50	<0.5	<0.5	<0.5	<0.5
	07/12/01	**NLPH**	--	--	**<50**	**190**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
	08/17/01 e	**--**	--	--	**--**	**--**	**--**	**--**	**--**	--
MW9G	11/02/95	NLPH	5.92	4.03	<50	<10	<0.5	<0.5	<0.5	<0.5
(9.95)	04/26/96	NLPH	5.28	4.67	<50	18	<0.5	<0.5	<0.5	<0.5
	08/22/96	NLPH	5.57	4.38	<50	18	<0.5	<0.5	<0.5	<0.5
	02/24/97	NLPH	5.30	4.65	<50	240	<0.5	0.57	<0.5	0.62
	03/16/98	---	---	---	---	---	---	---	---	---
	04/21/98	---	---	---	---	---	---	---	---	---
(12.99)	07/22/98	---	---	---	---	---	---	---	---	---
	12/22/98	NLPH	5.28	7.71	<50	1,100	<0.5	<0.5	<0.5	<0.5
	02/26/99	NLPH	5.31	7.68	<50	50	<0.5	<0.5	<0.5	<0.5
	05/18/99	NLPH	5.18	7.81	<1,000	3,990	<10	<10	<10	<10
	08/03/99	NLPH	6.00	6.99	<50	1,340	<0.5	<0.5	<0.5	<0.5
	12/03/99	NLPH	5.27	7.72	<50	<2	<0.5	<0.5	<0.5	0.55 c

TABLE 1
CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA
Former Exxon Service Station 7-0238
2200 East 12th Street
Oakland, California

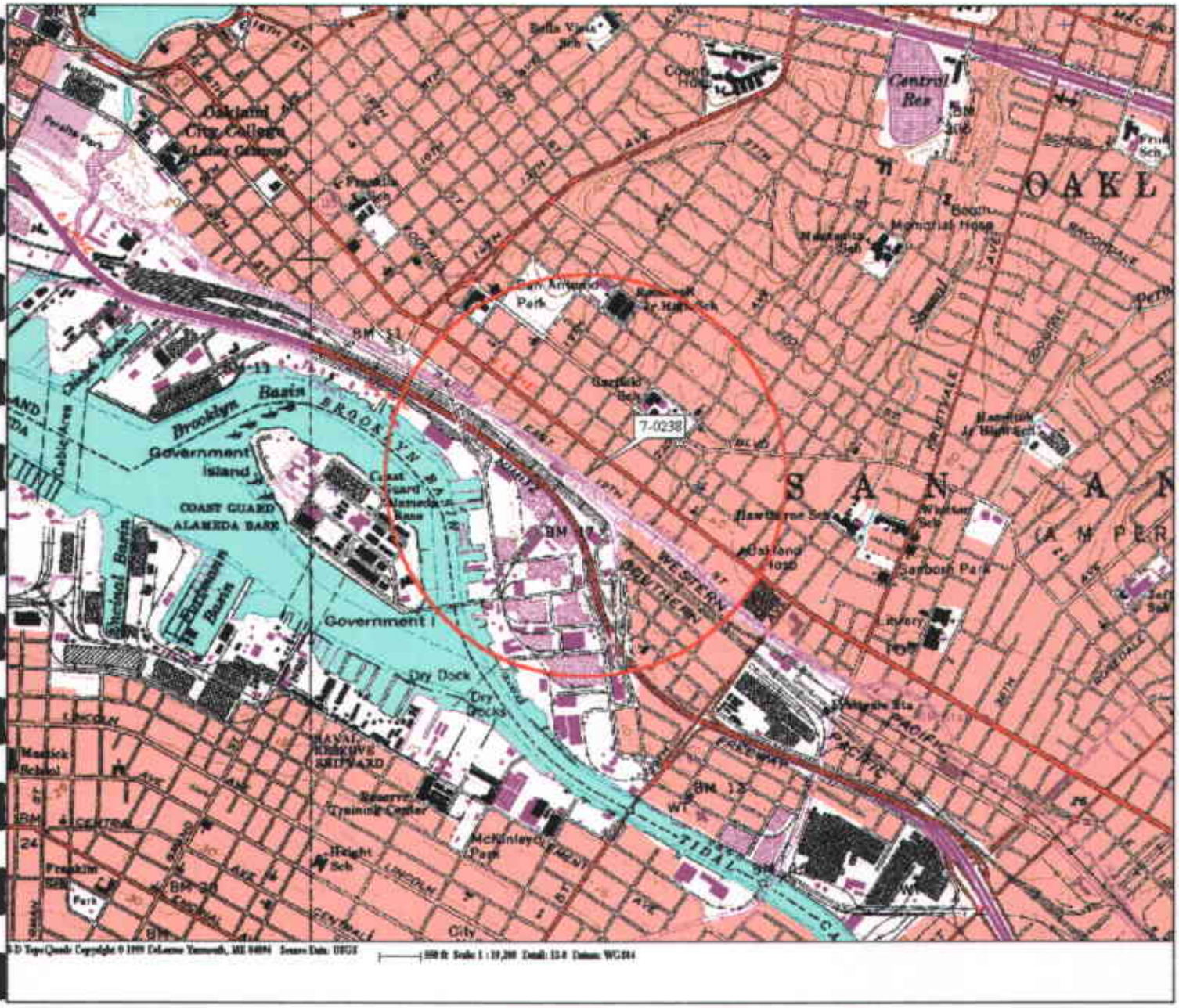
Well ID # (TOC)	Sampling Date	SUBJ	DTW	Elev.	TPHg	MTBE	B	T	E	X
		<	feet	>	<		ug/L			>
MW9G (cont.)	02/29/00	NLPH	4.60	8.39	<50	7,900	<0.5	<0.5	<0.5	<0.5
(12.99)	05/18/00	NLPH	5.16	7.83	<50	2,400	<0.5	<0.5	<0.5	<0.5
	07/24/00	NLPH	5.20	7.79	<50	1,000	<0.5	<0.5	<0.5	<0.5
	10/09/00	NLPH	5.26	7.73	<50	180	<0.5	<0.5	<0.5	<0.5
	01/10/01	NLPH	5.18	7.81	<50	1,200	<0.5	<0.5	<0.5	<0.5
	04/10/01	NLPH	5.08	7.91	<50	9,100	<0.5	<0.5	<0.5	<0.5
	07/12/01	**NLPH**	--	--	**<50**	**3,000**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
	8/17/01 e	---	---	---	---	---	---	---	---	---
MW9H	11/02/95	NLPH	8.40	0.18	<50	<10	<0.5	<0.5	<0.5	<0.5
(8.58)	04/26/96	NLPH	8.05	0.53	---	---	---	---	---	---
	08/22/96	NLPH	8.17	0.41	---	---	---	---	---	---
	02/24/97	---	---	---	---	---	---	---	---	---
	03/16/98	---	---	---	---	---	---	--	---	---
	04/21/98	---	---	---	---	---	---	---	---	---
(11.61)	07/22/98	---	---	---	---	---	---	---	---	---
	12/22/98	NLPH	7.81	3.80	<50	<2.5	<0.5	<0.5	<0.5	<0.5
	02/26/99	NLPH	7.61	4.00	<50	<2.5	<0.5	<0.5	<0.5	<0.5
	05/18/99	NLPH	8.00	3.61	<50	3.98	<0.5	<0.5	<0.5	<0.5
	08/03/99	NLPH	6.05	5.56	<50	<2.5	<0.5	<0.5	<0.5	<0.5
	12/03/99	NLPH	5.32	6.29	<50	<2	<0.5	<0.5	<0.5	0.57 c
	02/29/00	NLPH	7.10	4.51	<50	<2	<0.5	<0.5	<0.5	<0.5
	05/18/00	NLPH	7.84	3.77	<50	9.7	<0.5	<0.5	<0.5	<0.5
	07/24/00	NLPH	7.94	3.67	<50	17	<0.5	<0.5	<0.5	<0.5
	10/09/00	NLPH	8.09	3.52	<50	13	<0.5	<0.5	<0.5	1.1
	01/10/01	NLPH	7.89	3.72	<50	11	<0.5	<0.5	<0.5	0.5
	04/10/01	NLPH	8.71	2.90	<50	44	<0.5	0.78	0.52	2.36
	07/12/01	**NLPH**	--	--	**<50**	**28**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
	8/17/01 e	---	---	---	---	---	---	---	---	---
MW9I	11/02/95	NLPH	6.04	4.07	<50	<10	<0.5	<0.5	<0.5	<0.5
(10.11)	04/26/96	NLPH	5.27	4.84	<50	99	<0.5	<0.5	<0.5	<0.5
	08/22/96	NLPH	5.66	4.45	<50	170	<0.5	<0.5	<0.5	<0.5
	02/24/97	NLPH	5.24	4.87	120	9,100	<0.5	<0.5	<0.5	<0.5
	03/16/98	NLPH	4.91	5.20	<200	59,000	13	<2.0	<2.0	<2.0
	04/21/98	NLPH	5.08	5.03	<500	59,000	<5.0	<5.0	<5.0	<5.0
(13.14)	07/22/98	NLPH	5.44	7.70	<500	62,000	<5.0	<5.0	<5.0	<5.0
	12/22/98	NLPH	5.32	7.82	200	51,000	1.7	<0.5	<0.5	<0.5
	02/26/99	NLPH	4.71	8.43	<500	9,700	<5.0	<5.0	<5.0	<5.0

TABLE 1
CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA
Former Exxon Service Station 7-0238
2200 East 12th Street
Oakland, California

Well ID # (TOC)	Sampling Date	SUBJ	DTW	Elev.	TPHg	MTBE	B	T	E	X
		<	feet	>	<		ug/L			>
MW9I (cont.)	05/18/99	NLPH	5.30	7.84	<1,000	3,730	<10	<10	<10	<10
(13.14)	08/03/99	NLPH	5.98	7.16	<50	21,900	<0.5	0.650	<0.5	<0.5
	12/03/99	NLPH	5.31	7.83	<250	2,000	3.9	2.9	<2.5	14
	02/29/00	NLPH	4.20	8.94	50	16,000	0.74	<0.5	<0.5	<0.5
	05/18/00	NLPH	5.12	8.02	<50	2,900	<0.5	<0.5	<0.5	<0.5
	07/24/00	NLPH	5.41	7.73	<250	43,000	<2.5	<2.5	<2.5	<2.5
	10/09/00	NLPH	5.41	7.73	<2,500	54,000	1.6	<0.5	<0.5	<0.5
	01/10/01	NLPH	5.24	7.90	<250	36,000	<2.5	<2.5	<2.5	<2.5
	04/10/01	NLPH	4.84	8.30	<50	4,800	<0.5	<0.5	<0.5	<0.5
	07/12/01	**NLPH**	**---**	**---**	**<50**	**8,400**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
	08/17/01	**---**	**6.49**	**6.65**	**---**	**---**	**---**	**---**	**---**	**---**

Notes:

SUBJ	=	Results of subjective evaluation.
NLPH	=	No liquid-phase hydrocarbons present in well.
TOC	=	Elevation of top of well casing; relative to mean sea level.
DTW	=	Depth to water.
Elev.	=	Elevation of groundwater surface; relative to mean sea level.
TPPHg	=	Total petroleum hydrocarbons as gasoline analyzed using EPA Method 5030/8015 (modified).
MTBE	=	Methyl tertiary butyl ether analyzed using EPA Method 8021B.
BTEX	=	Benzene, toluene, ethylbenzene, and total xylenes analyzed using EPA Method 8021B.
<	=	Less than the indicated detection limit shown by the laboratory.
---	=	Not measured or sampled.
ug/L	=	Micrograms per Liter.
a	=	MTBE confirmed using EPA Method 8260.
b	=	Miscalculation in field. Field technician may have inadvertently monitored and sampled the wrong well. Resampled 5/27/99.
c	=	Analyte detected in the associated Trip Blank at 0.52 ug/L.
d	=	Due to measurement error during initial sampling event, DTW was re-measured on August 17, 2001. No samples were taken.
e	=	Well inaccessible due to uncontrollable traffic conditions.



FN 2293TOPO

EXPLANATION

1/2-mile radius circle

N

APPROXIMATE SCALE

0 0.5 1 mile

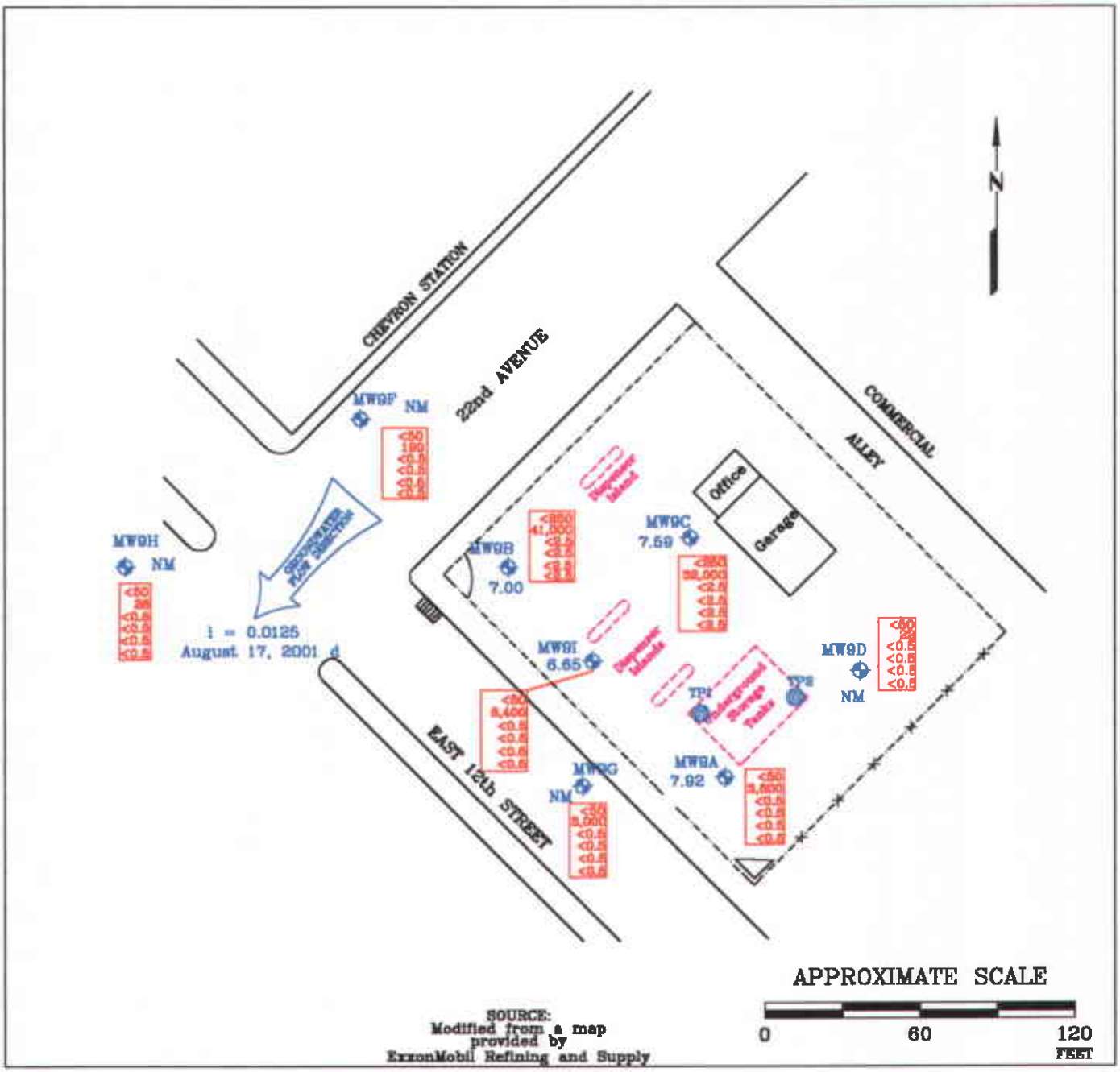
SOURCE:
Modified from a map
provided by
DeLorme 3-D TopoQuads

ENVIRONMENTAL RESOLUTIONS, INC.

SITE VICINITY MAP

FORMER EXXON SERVICE STATION 7-0238
2200 East 12th Street
Oakland, California

PROJECT NO.
2293
PLATE
1



SOURCE:
Modified from a map provided by
ExxonMobil Refining and Supply

FN 22930002

EXPLANATION

MW9I
Groundwater Monitoring Well

6.65 Groundwater elevation in feet, datum is mean sea level measured August 17, 2001

i = Interpreted Groundwater Gradient

TP2
UST Observation Well

NM-Not Measured

d- Due to measurement error, DTW was re-measured on August 17, 2001. No samples were taken.

Groundwater Concentrations in ug/L
Sampled July 12, 2001

<250	Total Petroleum Hydrocarbons as gasoline
41,000	Methyl Tertiary Butyl Ether
<2.5	Benzene
<2.5	Toluene
<2.5	Ethylbenzene
<2.5	Total Xylenes

ug/L Micrograms per Liter

< Less Than the Stated Laboratory Detection Level

ERI ENVIRONMENTAL RESOLUTIONS, INC.

GENERALIZED SITE PLAN

FORMER EXXON SERVICE STATION 7-0238
2200 East 12th Street
Oakland, California

PROJECT NO. 2293

PLATE 2

ATTACHMENT A

GROUNDWATER SAMPLING PROTOCOL

GROUNDWATER SAMPLING PROTOCOL

The static water level and separate-phase product level, if present, in each well that contains water and/or separate-phase product are measured with an ORS Interface Probe, which is accurate to the nearest 0.01 foot. To calculate groundwater elevations and evaluate groundwater gradient, depth to water (DTW) levels are subtracted from top of casing elevations.

Groundwater samples collected for subjective evaluation are collected by gently lowering approximately half the length of a clean Teflon® or polypropylene bailer past the air-water interface (if possible) and collecting a sample from near the surface of the water in the well. The samples are checked for measurable free-phase hydrocarbons or sheen. If appropriate, free-phase hydrocarbons are removed from the well.

Before water samples are collected from the groundwater monitoring wells, the wells are purged until a minimum of three well casing volumes is purged and stabilization of the temperature, pH, and conductivity is obtained. Water samples from the wells that do not obtain stability of the temperature, pH, and conductivity are considered to be "grab samples". The quantity of water purged from each well is calculated as follows:

1 well casing volume = $\pi r^2 h(7.48)$ where:

r	=	radius of the well casing in feet.
h	=	column of water in the well in feet (depth to bottom - depth to water)
7.48	=	conversion constant from cubic feet to gallons
π	=	ratio of the circumference of a circle to its diameter

Gallons of water purged/gallons in 1 well casing volume = well casing volumes removed.

After purging, each well is allowed to recharge to at least 80% of the initial water level. Water samples from wells that do not recover at least 80% (due to slow recharging of the well) between purging and sampling are considered to be "grab samples". Water samples are collected with a new, disposable Teflon® or polypropylene bailer. The groundwater is carefully poured into selected sample containers (40-milliliter (ml) glass vials, 1,000 ml glass amber bottles, etc.), which are filled so as to produce a positive meniscus.

Depending on the required analysis, each sample container is preserved with hydrochloric acid, nitric acid, etc., or it is preservative free. The type of preservative used for each sample is specified on the chain of custody form.

Each vial and glass amber bottle is sealed with a cap containing a Teflon® septum, and subsequently examined for air bubbles to avoid headspace, which would allow volatilization to occur. The samples are promptly transported in iced storage in a thermally-insulated ice chest, accompanied by a Chain-of-Custody Record, to a California-certified laboratory.

ATTACHMENT B

LABORATORY ANALYSIS REPORT AND CHAIN-OF-CUSTODY RECORD

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
(713) 660-0901

EXXON Company U.S.A.

Certificate of Analysis Number:

01070572

Report To:		Project Name:	2293-13x	
Environmental Resolution, Inc.		Site:	7-0238	
Scott Thompson		Site Address:	2200 East 12th	
73 Digital Drive Suite 100			Oakland	CA
Novato		PO Number:	EWR#21040347	
California		State:	California	
94949-		State Cert. No.:	1903	
ph: (415) 382-9105	fax: (415) 382-1856	Date Reported:	7/24/01	

This Report Contains A Total Of 25 Pages

Excluding This Page

And

Chain Of Custody

7/24/01

Date

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
(713) 660-0901

Case Narrative for:

EXXON Company U.S.A.

Certificate of Analysis Number:

01070572

Report To:		Project Name:	2293-13x	
Environmental Resolution, Inc.		Site:	7-0238	
Scott Thompson		Site Address:	2200 East 12th	
73 Digital Drive Suite 100			Oakland	CA
Novato		PO Number:	EWR#21040347	
California		State:	California	
94949-		State Cert. No.:	1903	
ph: (415) 382-9105	fax: (415) 382-1856	Date Reported:	7/24/01	

Matrix spike (MS) and matrix spike duplicate (MSD) samples are chosen and tested at random from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. Since the MS and MSD are chosen at random from an analytical batch, the sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The Laboratory Control Sample (LCS) and the Method Blank (MB) are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

Any other exceptions associated with this report will be footnoted in the analytical result page(s) or the quality control summary page(s).

Please do not hesitate to contact us if you have any questions or comments pertaining to this data report. Please reference the above Certificate of Analysis Number.

This report shall not be reproduced except in full, without the written approval of the laboratory. The reported results are only representative of the samples submitted for testing.

SPL, Inc. is pleased to be of service to you. We anticipate working with you in fulfilling all your current and future analytical needs.

7/24/01

Sonia West
Senior Project Manager

Date

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
(713) 660-0901

EXXON Company U.S.A.

Certificate of Analysis Number:

01070572

Report To: Environmental Resolution, Inc.
Scott Thompson
73 Digital Drive Suite 100

Novato
California
94949-
ph: (415) 382-9105 fax: (415) 382-1856

Fax To: Environmental Resolution, Inc.
Scott Thompson fax : (415) 382-1856

Project Name: 2293-13x
Site: 7-0238
Site Address: 2200 East 12th
Oakland CA
PO Number: EWR#21040347
State: California
State Cert. No.: 1903
Date Reported: 7/24/01

Client Sample ID	Lab Sample ID	Matrix	Date Collected	Date Received	COC ID	HOLD
TB 5/22/01	01070572-01	Water	7/12/01	7/17/01 10:00:00 AM		☐
BB-MW9D	01070572-02	Water	7/12/01 1:25:00 PM	7/17/01 10:00:00 AM		☐
5-MW9G	01070572-03	Water	7/12/01 9:40:00 AM	7/17/01 10:00:00 AM		☐
W-6-MW9C	01070572-04	Water	7/12/01 2:06:00 PM	7/17/01 10:00:00 AM		☐
6-MW9A	01070572-05	Water	7/12/01 1:50:00 PM	7/17/01 10:00:00 AM		☐
6-MW9F	01070572-06	Water	7/12/01 11:25:00 AM	7/17/01 10:00:00 AM		☐
W-8-MW9D	01070572-07	Water	7/12/01 1:30:00 PM	7/17/01 10:00:00 AM		☐
W-12-MW9H	01070572-08	Water	7/12/01 10:35:00 AM	7/17/01 10:00:00 AM		☐
5-MW9I	01070572-09	Water	7/12/01 1:40:00 PM	7/17/01 10:00:00 AM		☐
6-MW9B	01070572-10	Water	7/12/01 1:59:00 PM	7/17/01 10:00:00 AM		☐

Sonia West

7/24/01
Date

Sonia West
Senior Project Manager

Joel Grice
Laboratory Director

Ted Yen
Quality Assurance Officer

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
(713) 660-0901

Client Sample ID TB 5/22/01 **Collected:** 7/12/01 **SPL Sample ID:** 01070572-01

Site: 7-0238

Analyses/Method	Result		Rep.Limit	Dil. Factor	QUAL	Date Analyzed	Analyst	Seq. #
GASOLINE RANGE ORGANICS			**MCL**	**CA_GRO**		**Units: ug/L**		
Gasoline Range Organics	ND		50	1		07/19/01 9:11	DL	750160
Surr: 1,4-Difluorobenzene	108	%	62-144	1		07/19/01 9:11	DL	750160
Surr: 4-Bromofluorobenzene	102	%	44-153	1		07/19/01 9:11	DL	750160
PURGEABLE AROMATICS			**MCL**	**SW8021B**		**Units: ug/L**		
Benzene	ND		0.5	1		07/19/01 9:11	DL	750030
Ethylbenzene	ND		0.5	1		07/19/01 9:11	DL	750030
Methyl tert-butyl ether	ND		2	1		07/19/01 9:11	DL	750030
Toluene	ND		0.5	1		07/19/01 9:11	DL	750030
m,p-Xylene	ND		0.5	1		07/19/01 9:11	DL	750030
o-Xylene	ND		0.5	1		07/19/01 9:11	DL	750030
Xylenes,Total	ND		0.5	1		07/19/01 9:11	DL	750030
Surr: 1,4-Difluorobenzene	94.3	%	72-137	1		07/19/01 9:11	DL	750030
Surr: 4-Bromofluorobenzene	82.7	%	48-156	1		07/19/01 9:11	DL	750030

Sonia West

Sonia West
Project Manager

Qualifiers:
ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL
>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
(713) 660-0901

Client Sample ID W-BB-MW9D **Collected:** 7/12/01 1:25:00 **SPL Sample ID:** 01070572-02

Site: 7-0238

Analyses/Method	Result		Rep.Limit	Dil. Factor	QUAL	Date Analyzed	Analyst	Seq. #
GASOLINE RANGE ORGANICS			**MCL**	**CA_GRO**		**Units: ug/L**		
Gasoline Range Organics	ND		50	1		07/19/01 9:35	DL	750161
Surr: 1,4-Difluorobenzene	105	%	62-144	1		07/19/01 9:35	DL	750161
Surr: 4-Bromofluorobenzene	98.0	%	44-153	1		07/19/01 9:35	DL	750161
PURGEABLE AROMATICS			**MCL**	**SW8021B**		**Units: ug/L**		
Benzene	ND		0.5	1		07/19/01 9:35	DL	750031
Ethylbenzene	ND		0.5	1		07/19/01 9:35	DL	750031
Methyl tert-butyl ether	ND		2	1		07/19/01 9:35	DL	750031
Toluene	ND		0.5	1		07/19/01 9:35	DL	750031
m,p-Xylene	ND		0.5	1		07/19/01 9:35	DL	750031
o-Xylene	ND		0.5	1		07/19/01 9:35	DL	750031
Xylenes,Total	ND		0.5	1		07/19/01 9:35	DL	750031
Surr: 1,4-Difluorobenzene	93.8	%	72-137	1		07/19/01 9:35	DL	750031
Surr: 4-Bromofluorobenzene	84.2	%	48-156	1		07/19/01 9:35	DL	750031

Sonia West

Sonia West
Project Manager

Qualifiers:
ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL
>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
(713) 660-0901

Client Sample ID W-5-MW9G **Collected:** 7/12/01 9:40:00 **SPL Sample ID:** 01070572-03

Site: 7-0238

Analyses/Method	Result		Rep.Limit	Dil. Factor	QUAL	Date Analyzed	Analyst	Seq. #
GASOLINE RANGE ORGANICS			**MCL**	**CA_GRO**		**Units: ug/L**		
Gasoline Range Organics	ND		50	1		07/19/01 12:49	DL	750182
Surr: 1,4-Difluorobenzene	106	%	62-144	1		07/19/01 12:49	DL	750182
Surr: 4-Bromofluorobenzene	102	%	44-153	1		07/19/01 12:49	DL	750182
PURGEABLE AROMATICS			**MCL**	**SW8021B**		**Units: ug/L**		
Benzene	ND		0.5	1		07/19/01 12:49	DL	750063
Ethylbenzene	ND		0.5	1		07/19/01 12:49	DL	750063
Methyl tert-butyl ether	3000		50	25		07/21/01 20:51	DL	752380
Toluene	ND		0.5	1		07/19/01 12:49	DL	750063
m,p-Xylene	ND		0.5	1		07/19/01 12:49	DL	750063
o-Xylene	ND		0.5	1		07/19/01 12:49	DL	750063
Xylenes,Total	ND		0.5	1		07/19/01 12:49	DL	750063
Surr: 1,4-Difluorobenzene	93.0	%	72-137	1		07/19/01 12:49	DL	750063
Surr: 1,4-Difluorobenzene	102	%	72-137	25		07/21/01 20:51	DL	752380
Surr: 4-Bromofluorobenzene	84.7	%	48-156	1		07/19/01 12:49	DL	750063
Surr: 4-Bromofluorobenzene	98.5	%	48-156	25		07/21/01 20:51	DL	752380

Sonia West

Sonia West
Project Manager

Qualifiers:
ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL
>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
(713) 660-0901

Client Sample ID W-6-MW9C **Collected:** 7/12/01 2:06:00 **SPL Sample ID:** 01070572-04

Site: 7-0238

Analyses/Method	Result		Rep.Limit		Dil. Factor	QUAL	Date Analyzed	Analyst	Seq. #
GASOLINE RANGE ORGANICS				**MCL**	**CA_GRO**		**Units: ug/L**		
Gasoline Range Organics	ND		250		5		07/19/01 3:10	DL	749350
Surr: 1,4-Difluorobenzene	107	%	62-144		5		07/19/01 3:10	DL	749350
Surr: 4-Bromofluorobenzene	99.1	%	44-153		5		07/19/01 3:10	DL	749350
PURGEABLE AROMATICS				**MCL**	**SW8021B**		**Units: ug/L**		
Benzene	ND		2.5		5		07/19/01 3:10	DL	749323
Ethylbenzene	ND		2.5		5		07/19/01 3:10	DL	749323
Methyl tert-butyl ether	32000		500		250		07/21/01 21:16	DL	752381
Toluene	ND		2.5		5		07/19/01 3:10	DL	749323
m,p-Xylene	ND		2.5		5		07/19/01 3:10	DL	749323
o-Xylene	ND		2.5		5		07/19/01 3:10	DL	749323
Xylenes,Total	ND		2.5		5		07/19/01 3:10	DL	749323
Surr: 1,4-Difluorobenzene	94.6	%	72-137		250		07/21/01 21:16	DL	752381
Surr: 1,4-Difluorobenzene	92.0	%	72-137		5		07/19/01 3:10	DL	749323
Surr: 4-Bromofluorobenzene	93.9	%	48-156		250		07/21/01 21:16	DL	752381
Surr: 4-Bromofluorobenzene	84.7	%	48-156		5		07/19/01 3:10	DL	749323

Sonia West

Sonia West
Project Manager

Qualifiers:
ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL
>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
(713) 660-0901

Client Sample ID W-6-MW9A **Collected:** 7/12/01 1:50:00 **SPL Sample ID:** 01070572-05

Site: 7-0238

Analyses/Method	Result		Rep.Limit	Dil. Factor	QUAL	Date Analyzed	Analyst	Seq. #
GASOLINE RANGE ORGANICS			**MCL**	**CA_GRO**		**Units: ug/L**		
Gasoline Range Organics	ND		50	1		07/22/01 11:07	DL	754093
Surr: 1,4-Difluorobenzene	113	%	62-144	1		07/22/01 11:07	DL	754093
Surr: 4-Bromofluorobenzene	86.0	%	44-153	1		07/22/01 11:07	DL	754093
PURGEABLE AROMATICS			**MCL**	**SW8021B**		**Units: ug/L**		
Benzene	ND		0.5	1		07/22/01 11:07	DL	754062
Ethylbenzene	ND		0.5	1		07/22/01 11:07	DL	754062
Methyl tert-butyl ether	3600		100	50		07/22/01 18:43	DL	754076
Toluene	ND		0.5	1		07/22/01 11:07	DL	754062
m,p-Xylene	ND		0.5	1		07/22/01 11:07	DL	754062
o-Xylene	ND		0.5	1		07/22/01 11:07	DL	754062
Xylenes,Total	ND		0.5	1		07/22/01 11:07	DL	754062
Surr: 1,4-Difluorobenzene	106	%	72-137	1		07/22/01 11:07	DL	754062
Surr: 1,4-Difluorobenzene	103	%	72-137	50		07/22/01 18:43	DL	754076
Surr: 4-Bromofluorobenzene	97.6	%	48-156	50		07/22/01 18:43	DL	754076
Surr: 4-Bromofluorobenzene	99.0	%	48-156	1		07/22/01 11:07	DL	754062

Sonia West

Sonia West
Project Manager

Qualifiers:
ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL
>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
(713) 660-0901

Client Sample ID W-6-MW9F **Collected:** 7/12/01 11:25:00 **SPL Sample ID:** 01070572-06

Site: 7-0238

Analyses/Method	Result		Rep.Limit	Dil. Factor	QUAL	Date Analyzed	Analyst	Seq. #
GASOLINE RANGE ORGANICS			**MCL**	**CA_GRO**		**Units: ug/L**		
Gasoline Range Organics	ND		50	1		07/19/01 9:59	DL	750163
Surr: 1,4-Difluorobenzene	106	%	62-144	1		07/19/01 9:59	DL	750163
Surr: 4-Bromofluorobenzene	101	%	44-153	1		07/19/01 9:59	DL	750163
PURGEABLE AROMATICS			**MCL**	**SW8021B**		**Units: ug/L**		
Benzene	ND		0.5	1		07/19/01 9:59	DL	750034
Ethylbenzene	ND		0.5	1		07/19/01 9:59	DL	750034
Methyl tert-butyl ether	190		2	1		07/19/01 9:59	DL	750034
Toluene	ND		0.5	1		07/19/01 9:59	DL	750034
m,p-Xylene	ND		0.5	1		07/19/01 9:59	DL	750034
o-Xylene	ND		0.5	1		07/19/01 9:59	DL	750034
Xylenes,Total	ND		0.5	1		07/19/01 9:59	DL	750034
Surr: 1,4-Difluorobenzene	91.7	%	72-137	1		07/19/01 9:59	DL	750034
Surr: 4-Bromofluorobenzene	82.8	%	48-156	1		07/19/01 9:59	DL	750034

Sonia West

Sonia West
Project Manager

Qualifiers:
ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL
>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
(713) 660-0901

Client Sample ID W-8-MW9D **Collected:** 7/12/01 1:30:00 **SPL Sample ID:** 01070572-07

Site: 7-0238

Analyses/Method	Result		Rep.Limit		Dil. Factor	QUAL	Date Analyzed	Analyst	Seq. #
GASOLINE RANGE ORGANICS				**MCL**	**CA_GRO**		**Units: ug/L**		
Gasoline Range Organics	ND		50		1		07/19/01 10:23	DL	750165
Surr: 1,4-Difluorobenzene	103	%	62-144		1		07/19/01 10:23	DL	750165
Surr: 4-Bromofluorobenzene	100	%	44-153		1		07/19/01 10:23	DL	750165
PURGEABLE AROMATICS				**MCL**	**SW8021B**		**Units: ug/L**		
Benzene	ND		0.5		1		07/19/01 10:23	DL	750039
Ethylbenzene	ND		0.5		1		07/19/01 10:23	DL	750039
Methyl tert-butyl ether	22		2		1		07/19/01 10:23	DL	750039
Toluene	ND		0.5		1		07/19/01 10:23	DL	750039
m,p-Xylene	ND		0.5		1		07/19/01 10:23	DL	750039
o-Xylene	ND		0.5		1		07/19/01 10:23	DL	750039
Xylenes,Total	ND		0.5		1		07/19/01 10:23	DL	750039
Surr: 1,4-Difluorobenzene	90.6	%	72-137		1		07/19/01 10:23	DL	750039
Surr: 4-Bromofluorobenzene	81.8	%	48-156		1		07/19/01 10:23	DL	750039

Sonia West

Sonia West
Project Manager

Qualifiers:
ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL
>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
(713) 660-0901

Client Sample ID W-12-MW9H **Collected:** 7/12/01 10:35:00 **SPL Sample ID:** 01070572-08

Site: 7-0238

Analyses/Method	Result		Rep.Limit	Dil. Factor	QUAL	Date Analyzed	Analyst	Seq. #
GASOLINE RANGE ORGANICS			**MCL**	**CA_GRO**		**Units: ug/L**		
Gasoline Range Organics	ND		50	1		07/19/01 10:47	DL	750166
Surr: 1,4-Difluorobenzene	106	%	62-144	1		07/19/01 10:47	DL	750166
Surr: 4-Bromofluorobenzene	97.0	%	44-153	1		07/19/01 10:47	DL	750166
PURGEABLE AROMATICS			**MCL**	**SW8021B**		**Units: ug/L**		
Benzene	ND		0.5	1		07/19/01 10:47	DL	750045
Ethylbenzene	ND		0.5	1		07/19/01 10:47	DL	750045
Methyl tert-butyl ether	28		2	1		07/19/01 10:47	DL	750045
Toluene	ND		0.5	1		07/19/01 10:47	DL	750045
m,p-Xylene	ND		0.5	1		07/19/01 10:47	DL	750045
o-Xylene	ND		0.5	1		07/19/01 10:47	DL	750045
Xylenes,Total	ND		0.5	1		07/19/01 10:47	DL	750045
Surr: 1,4-Difluorobenzene	92.4	%	72-137	1		07/19/01 10:47	DL	750045
Surr: 4-Bromofluorobenzene	83.7	%	48-156	1		07/19/01 10:47	DL	750045

Sonia West

Sonia West
Project Manager

Qualifiers:
ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL
>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
(713) 660-0901

Client Sample ID W-5-MW9I **Collected:** 7/12/01 1:40:00 **SPL Sample ID:** 01070572-09

Site: 7-0238

Analyses/Method	Result		Rep.Limit	Dil. Factor	QUAL	Date Analyzed	Analyst	Seq. #
GASOLINE RANGE ORGANICS			**MCL**	**CA_GRO**		**Units: ug/L**		
Gasoline Range Organics	ND		50	1		07/19/01 11:12	DL	750167
Surr: 1,4-Difluorobenzene	109	%	62-144	1		07/19/01 11:12	DL	750167
Surr: 4-Bromofluorobenzene	101	%	44-153	1		07/19/01 11:12	DL	750167
PURGEABLE AROMATICS			**MCL**	**SW8021B**		**Units: ug/L**		
Benzene	ND		0.5	1		07/19/01 11:12	DL	750051
Ethylbenzene	ND		0.5	1		07/19/01 11:12	DL	750051
Methyl tert-butyl ether	8400		100	50		07/21/01 21:42	DL	752382
Toluene	ND		0.5	1		07/19/01 11:12	DL	750051
m,p-Xylene	ND		0.5	1		07/19/01 11:12	DL	750051
o-Xylene	ND		0.5	1		07/19/01 11:12	DL	750051
Xylenes,Total	ND		0.5	1		07/19/01 11:12	DL	750051
Surr: 1,4-Difluorobenzene	92.4	%	72-137	1		07/19/01 11:12	DL	750051
Surr: 1,4-Difluorobenzene	98.9	%	72-137	50		07/21/01 21:42	DL	752382
Surr: 4-Bromofluorobenzene	96.5	%	48-156	50		07/21/01 21:42	DL	752382
Surr: 4-Bromofluorobenzene	84.5	%	48-156	1		07/19/01 11:12	DL	750051

Sonia West

Sonia West
Project Manager

Qualifiers:
ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL
>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
(713) 660-0901

Client Sample ID W-6-MW9B **Collected:** 7/12/01 1:59:00 **SPL Sample ID:** 01070572-10

Site: 7-0238

Analyses/Method	Result		Rep.Limit		Dil. Factor	QUAL	Date Analyzed	Analyst	Seq. #
GASOLINE RANGE ORGANICS				**MCL**	**CA_GRO**		**Units: ug/L**		
Gasoline Range Organics	ND		250		5		07/19/01 3:58	DL	749352
Surr: 1,4-Difluorobenzene	107	%	62-144		5		07/19/01 3:58	DL	749352
Surr: 4-Bromofluorobenzene	97.1	%	44-153		5		07/19/01 3:58	DL	749352
PURGEABLE AROMATICS				**MCL**	**SW8021B**		**Units: ug/L**		
Benzene	ND		2.5		5		07/19/01 3:58	DL	749325
Ethylbenzene	ND		2.5		5		07/19/01 3:58	DL	749325
Methyl tert-butyl ether	41000		500		250		07/21/01 22:07	DL	752383
Toluene	ND		2.5		5		07/19/01 3:58	DL	749325
m,p-Xylene	ND		2.5		5		07/19/01 3:58	DL	749325
o-Xylene	ND		2.5		5		07/19/01 3:58	DL	749325
Xylenes,Total	ND		2.5		5		07/19/01 3:58	DL	749325
Surr: 1,4-Difluorobenzene	91.1	%	72-137		5		07/19/01 3:58	DL	749325
Surr: 1,4-Difluorobenzene	99.1	%	72-137		250		07/21/01 22:07	DL	752383
Surr: 4-Bromofluorobenzene	95.2	%	48-156		250		07/21/01 22:07	DL	752383
Surr: 4-Bromofluorobenzene	86.6	%	48-156		5		07/19/01 3:58	DL	749325

Sonia West

Sonia West
Project Manager

Qualifiers:
ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL
>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference

Quality Control Documentation

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
(713) 660-0901

Quality Control Report

EXXON Company U.S.A.

2293-13x

Analysis: Purgeable Aromatics
Method: SW8021B

WorkOrder: 01070572
Lab Batch ID: R39390

Method Blank

RunID: VARE_010718B-749303 Units: ug/L
Analysis Date: 07/18/2001 15:06 Analyst: DL

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
01070572-04A	W-6-MW9C
01070572-10A	W-6-MW9B

Analyte	Result	Rep Limit
Benzene	ND	0.50
Ethylbenzene	ND	0.50
Methyl tert-butyl ether	ND	2.0
Toluene	ND	0.50
m,p-Xylene	ND	0.50
o-Xylene	ND	0.50
Xylenes,Total	ND	0.50
Surr: 1,4-Difluorobenzene	90.8	72-137
Surr: 4-Bromofluorobenzene	85.3	48-156

Laboratory Control Sample (LCS)

RunID: VARE_010718B-749302 Units: ug/L
Analysis Date: 07/18/2001 14:18 Analyst: DL

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Benzene	50	52	104	70	130
Ethylbenzene	50	53	107	70	130
Methyl tert-butyl ether	50	49	98	70	130
Toluene	50	52	104	70	130
m,p-Xylene	100	110	106	70	130
o-Xylene	50	53	106	70	130
Xylenes,Total	150	163	109	70	130

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 01070565-03
RunID: VARE_010718B-749306 Units: ug/L
Analysis Date: 07/18/2001 16:20 Analyst: DL

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Benzene	ND	20	20	98.2	20	19	96.7	1.51	21	32	164
Ethylbenzene	ND	20	20	97.7	20	20	97.8	00307	19	52	142
Methyl tert-butyl ether	ND	20	22	108	20	21	105	2.10	20	39	150

Qualifiers:
ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
J - Estimated value between MDL and PQL
MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
(713) 660-0901

Quality Control Report

EXXON Company U.S.A.

2293-13x

Analysis: Purgeable Aromatics
Method: SW8021B

WorkOrder: 01070572
Lab Batch ID: R39390

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 01070565-03
RunID: VARE_010718B-749306 Units: ug/L
Analysis Date: 07/18/2001 16:20 Analyst: DL

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
luene	ND	20	19	95.2	20	19	94.7	0.553	20	38	159
p-Xylene	ND	40	40	99.5	40	40	101	1.28	17	53	144
o-Xylene	ND	20	20	98.7	20	20	99.4	0.682	18	53	143
Xylenes,Total	ND	60	60	100	60	60	100	0	18	53	144

Qualifiers:
ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
J - Estimated value between MDL and PQL
MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
(713) 660-0901

Quality Control Report

EXXON Company U.S.A.

2293-13x

Analysis: Gasoline Range Organics
Method: CA_GRO

WorkOrder: 01070572
Lab Batch ID: R39391

Method Blank

RunID: VARE_010718C-749328 Units: mg/L
Analysis Date: 07/18/2001 15:06 Analyst: DL

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
01070572-04A	W-6-MW9C
01070572-10A	W-6-MW9B

Analyte	Result	Rep Limit
Gasoline Range Organics	ND	0.050
Surr: 1,4-Difluorobenzene	105.7	62-144
Surr: 4-Bromofluorobenzene	100.7	44-153

Laboratory Control Sample (LCS)

RunID: VARE_010718C-749327 Units: mg/L
Analysis Date: 07/18/2001 14:42 Analyst: DL

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Gasoline Range Organics	1	0.87	87	70	130

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 01070565-04
RunID: VARE_010716C-749407 Units: mg/L
Analysis Date: 07/18/2001 17:07 Analyst: DL

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Gasoline Range Organics	ND	0.9	0.93	104	0.9	0.94	104	0.310	36	36	160

Qualifiers:
ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
J - Estimated value between MDL and PQL
MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
(713) 660-0901

Quality Control Report

EXXON Company U.S.A.

2293-13x

Analysis: Purgeable Aromatics
Method: SW8021B
WorkOrder: 01070572
Lab Batch ID: R39434

Method Blank

RunID: VARE_010719A-750021 Units: ug/L
Analysis Date: 07/19/2001 6:46 Analyst: DL

Analyte	Result	Rep Limit
Benzene	ND	0.50
Ethylbenzene	ND	0.50
Methyl tert-butyl ether	ND	2.0
Toluene	ND	0.50
m,p-Xylene	ND	0.50
o-Xylene	ND	0.50
Xylenes,Total	ND	0.50
Surr: 1,4-Difluorobenzene	94.1	72-137
Surr: 4-Bromofluorobenzene	85.8	48-156

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
01070572-01A	TB 5/22/01
01070572-02A	W-BB-MW9D
01070572-03A	W-5-MW9G
01070572-06A	W-6-MW9F
01070572-07A	W-8-MW9D
01070572-08A	W-12-MW9H
01070572-09A	W-5-MW9I

Laboratory Control Sample (LCS)

RunID: VARE_010719A-750016 Units: ug/L
Analysis Date: 07/19/2001 5:59 Analyst: DL

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Benzene	50	56	112	70	130
Ethylbenzene	50	56	112	70	130
Methyl tert-butyl ether	50	54	107	70	130
Toluene	50	55	111	70	130
m,p-Xylene	100	110	110	70	130
o-Xylene	50	56	112	70	130
Xylenes,Total	150	166	111	70	130

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 01070572-06
RunID: VARE_010719A-750024 Units: ug/L
Analysis Date: 07/19/2001 7:11 Analyst: DL

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Benzene	ND	20	21	103	20	20	100	2.49	21	32	164
Ethylbenzene	ND	20	20	101	20	20	99.9	1.51	19	52	142
Methyl tert-butyl ether	190	20	200	66.9	20	200	68.1	1.73	20	39	150

Qualifiers:
ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
J - Estimated value between MDL and PQL
MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
(713) 660-0901

Quality Control Report

EXXON Company U.S.A.

2293-13x

Analysis: Purgeable Aromatics
Method: SW8021B

WorkOrder: 01070572
Lab Batch ID: R39434

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 01070572-06
RunID: VARE_010719A-750024 Units: ug/L
Analysis Date: 07/19/2001 7:11 Analyst: DL

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Toluene	ND	20	20	99.1	20	20	98.4	0.731	20	38	159
p-Xylene	ND	40	41	103	40	41	102	0.858	17	53	144
o-Xylene	ND	20	21	103	20	20	100	2.93	18	53	143
Xylenes,Total	ND	60	62	103	60	61	102	1.63	18	53	144

Qualifiers:
ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
J - Estimated value between MDL and PQL
MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
(713) 660-0901

Quality Control Report

EXXON Company U.S.A.

2293-13x

Analysis: Gasoline Range Organics
Method: CA_GRO

WorkOrder: 01070572
Lab Batch ID: R39441

Method Blank

RunID: VARE_010719B-750156 Units: mg/L
Analysis Date: 07/19/2001 6:46 Analyst: DL

Analyte	Result	Rep Limit
Gasoline Range Organics	ND	0.050
Surr: 1,4-Difluorobenzene	107.3	62-144
Surr: 4-Bromofluorobenzene	101.7	44-153

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
01070572-01A	TB 5/22/01
01070572-02A	W-BB-MW9D
01070572-03A	W-5-MW9G
01070572-06A	W-6-MW9F
01070572-07A	W-8-MW9D
01070572-08A	W-12-MW9H
01070572-09A	W-5-MW9I

Laboratory Control Sample (LCS)

RunID: VARE_010719B-750155 Units: mg/L
Analysis Date: 07/19/2001 6:22 Analyst: DL

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Gasoline Range Organics	1	0.93	93	70	130

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 01070572-07
RunID: VARE_010719B-750158 Units: mg/L
Analysis Date: 07/19/2001 7:59 Analyst: DL

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
soline Range Organics	ND	0.9	0.88	97.5	0.9	0.87	96.6	0.870	36	36	160

Qualifiers:
ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
J - Estimated value between MDL and PQL
MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
(713) 660-0901

Quality Control Report

EXXON Company U.S.A.

2293-13x

Analysis: Purgeable Aromatics
Method: SW8021B

WorkOrder: 01070572
Lab Batch ID: R39540

Method Blank

RunID: VARD_010721A-752360 Units: ug/L
Analysis Date: 07/21/2001 8:21 Analyst: DL

Analyte	Result	Rep Limit
Methyl tert-butyl ether	ND	2.0
Surr: 1,4-Difluorobenzene	101.3	72-137
Surr: 4-Bromofluorobenzene	99.6	48-156

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
01070572-03A	W-5-MW9G
01070572-04A	W-6-MW9C
01070572-09A	W-5-MW9I
01070572-10A	W-6-MW9B

Laboratory Control Sample (LCS)

RunID: VARD_010721A-752359 Units: ug/L
Analysis Date: 07/21/2001 7:55 Analyst: DL

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Methyl tert-butyl ether	50	50	100	70	130

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 01070660-03
RunID: VARD_010721A-752361 Units: ug/L
Analysis Date: 07/21/2001 8:46 Analyst: DL

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Methyl tert-butyl ether	1.3	20	18	84.5	20	18	82.7	2.13	20	39	150

Qualifiers:
ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
J - Estimated value between MDL and PQL
MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
(713) 660-0901

Quality Control Report

EXXON Company U.S.A.

2293-13x

Analysis: Purgeable Aromatics
Method: SW8021B

WorkOrder: 01070572
Lab Batch ID: R39656

Method Blank

RunID: VARD_010722A-754051 Units: ug/L
Analysis Date: 07/22/2001 1:56 Analyst: DL

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
01070572-05A	W-6-MW9A

Analyte	Result	Rep Limit
Benzene	ND	0.50
Ethylbenzene	ND	0.50
Methyl tert-butyl ether	ND	2.0
Toluene	ND	0.50
m,p-Xylene	ND	0.50
o-Xylene	ND	0.50
Xylenes,Total	ND	0.50
Surr: 1,4-Difluorobenzene	101.2	72-137
Surr: 4-Bromofluorobenzene	99.1	48-156

Laboratory Control Sample (LCS)

RunID: VARD_010722A-754050 Units: ug/L
Analysis Date: 07/22/2001 1:05 Analyst: DL

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Benzene	50	45	90	70	130
Ethylbenzene	50	45	90	70	130
Methyl tert-butyl ether	50	43	85	70	130
Toluene	50	45	90	70	130
m,p-Xylene	100	88	88	70	130
o-Xylene	50	45	89	70	130
Xylenes,Total	150	133	89	70	130

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 01070658-02
RunID: VARD_010722A-754052 Units: ug/L
Analysis Date: 07/22/2001 2:21 Analyst: DL

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Benzene	ND	20	16	79.3	20	16	77.7	2.01	21	32	164
Ethylbenzene	ND	20	15	73.4	20	15	72.6	0.982	19	52	142
Methyl tert-butyl ether	110	20	120	25.0 *	20	120	28.5 *	13.3	20	39	150

Qualifiers:
ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
J - Estimated value between MDL and PQL
MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
(713) 660-0901

Quality Control Report

EXXON Company U.S.A.

2293-13x

Analysis: Purgeable Aromatics
Method: SW8021B

WorkOrder: 01070572
Lab Batch ID: R39656

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 01070658-02
RunID: VARD_010722A-754052 Units: ug/L
Analysis Date: 07/22/2001 2:21 Analyst: DL

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Toluene	ND	20	15	76.2	20	15	75.7	0.776	20	38	159
m,p-Xylene	ND	40	29	72.7	40	29	72.0	0.976	17	53	144
o-Xylene	ND	20	16	80.3	20	16	78.4	2.36	18	53	143
Xylenes,Total	ND	60	45	75.0	60	45	75.0	0	18	53	144

Qualifiers:
ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
J - Estimated value between MDL and PQL
MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
(713) 660-0901

Quality Control Report

EXXON Company U.S.A.

2293-13x

Analysis: Gasoline Range Organics
Method: CA_GRO

WorkOrder: 01070572
Lab Batch ID: R39658

Method Blank

RunID: VARD_010722B-754081 Units: mg/L
Analysis Date: 07/22/2001 1:56 Analyst: DL

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
01070572-05A	W-6-MW9A

Analyte	Result	Rep Limit
Gasoline Range Organics	ND	0.050
Surr: 1,4-Difluorobenzene	103.7	62-144
Surr: 4-Bromofluorobenzene	83.7	44-153

Laboratory Control Sample (LCS)

RunID: VARD_010722B-754080 Units: mg/L
Analysis Date: 07/22/2001 1:30 Analyst: DL

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Gasoline Range Organics	1	0.81	81	70	130

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 01070658-03
RunID: VARD_010722B-754082 Units: mg/L
Analysis Date: 07/22/2001 3:12 Analyst: DL

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Gasoline Range Organics	ND	0.9	0.64	71.3	0.9	0.63	69.7	2.33	36	36	160

Qualifiers:

ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
J - Estimated value between MDL and PQL
MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.

Sample Receipt Checklist

And

Chain of Custody

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
(713) 660-0901

Sample Receipt Checklist

Workorder:	01070572	Received By:	NB
Date and Time Received:	7/17/01 10:00:00 AM	Carrier name:	FedEx
Temperature:	4	Chilled by:	Water Ice

1.	Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present	☐
2.	Custody seals intact on shippping container/cooler?	Yes ☑	No ☐	Not Present	☐
3.	Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present	☑
4.	Chain of custody present?	Yes ☑	No ☐		
5.	Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
6.	Chain of custody agrees with sample labels?	Yes ☑	No ☐		
7.	Samples in proper container/bottle?	Yes ☑	No ☐		
8.	Sample containers intact?	Yes ☑	No ☐		
9.	Sufficient sample volume for indicated test?	Yes ☑	No ☐		
10.	All samples received within holding time?	Yes ☑	No ☐		
11.	Container/Temp Blank temperature in compliance?	Yes ☑	No ☐		
12.	Water - VOA vials have zero headspace?	Yes ☑	No ☐	Not Applicable	☐
13.	Water - pH acceptable upon receipt?	Yes ☑	No ☐	Not Applicable	☐

SPL Representative: _____ **Contact Date & Time:** _____

Client Name Contacted: _____

Non Conformance Issues: _____

Client Instructions: _____

EXXON COMPANY, USA. (West Coast)

CHAIN OF CUSTODY RECORD NO. _____ Page 1 of 1

Exxon Engineer: Carlos Ortega Phone: (925) 246-8747
Consultant Co. Name ERI Contact: Scott Thompson
Address: 73 Digital Dr. Suite 100 Fax: (415) 382 ~~555~~ 1956
Novato CA 94949
RAS #: 7-0238 Facility/State ID # (TN Only): _____
AFE # (Terminal Only): _____ Consultant Project #: 2212-13X
Location: 2220 E. 12th St. (City) Oakland (State) CA
☐ EE ☐ C&M ☐ SDT
Consultant Work Release #: 21041347
Sampled By: JCC

SAMPLE I.D.	DATE	TIME	COMP.	GRAB	MATRIX H_2O	MATRIX SOIL	MATRIX AIR	OTHER	PRESERVATIVE	NO. OF CONTAINERS	CONTAINER SIZE	TPH/GC 8015 DRO ☐	TPH/GC 8015 GRO ☒	BTEX 8020 ☐	BTEX 602 ☒	MTBE 8020 ☐	MTBE 8260 ☒	OXYGENATES (7) 8260 ☐	O&G GRAV 413.2 ☐	O&G IR 413.1 ☐	VOL. 8260 ☐	VOL. 624 ☐	SEMI-VOL 8270 ☐	SEMI-VOL 625 ☐	PNA/PAH 8100 ☐	PNA/PAH 8310 ☐	PNA/PAH 8270 ☐	PCB/PEST 8081/8082 ☐	PCB ONLY ☐	TCLP FLUID ☐ VOA ☐ SEMI-VOA ☐ PEST ☐ HERB ☐	METALS, TOTAL ☐	METALS, TCLP ☐	LEAD, TOTAL 239.1 ☐ 7421 ☐	LEAD, TCLP ☐	LEAD, DISSOLVED ☐	LEAD TOTAL ☐	REACTIVITY ☐	CORROSIVITY ☐	FLASH POINT ☐	PURGEABLE HYDROCARBON 8010 ☐ 601 ☐	TPH/IR 418.1 ☐	TOX/TOH ☐
TB	6/22	—			X				HCl	2	40 mL	X		X		X																									
W-DD-MW9D	1325	7/12								2																														
W-F-MW9G	940									3																														
W-G-MW9C	1400																																						
W-G-MW9A	1350																																						
W-G-MW9E	1125																																						
W-9-MW9D	1320																																						
W-10-MW9H	1035																																						
W-5-MW9I	1340																																						
W-MW9R	1359	↓			↓				↓	↓	↓	↓		↓		↓																								

TAT
24 HR. ___* 72 HR. ___*
48 HR. ___* 96 HR. ___*
8 Business X *Contact US Prior to Sending Sample
Other ___

EXXON UST CONTRACT NO. C41483

QA/QC Level
Standard X CLP ☐ Other ☐ _____

SPECIAL DETECTION LIMITS (Specify)

SPECIAL REPORTING REQUIREMENTS (Specify)
PDF ☐ ☐ EDD
FAX ☐ ☐ FAX C-O-C W/REPORT

REMARKS:

LAB USE ONLY Lot # Storage Location
WORK ORDER #: LAB WORK RELEASE #:

CUSTODY RECORD

	Date	Time	
Relinquished By Sampler: for JCC	7/16/01	1300	Received By:
Relinquished:	Date	Time	Received By:
Relinquished:	Date	Time	Received By:
			Way Bill #: Cooler Temp: